

What doctors wish patients knew about home BP measurement

MAY 21, 2021

Sara Berg, MS

Senior News Writer

Nearly half of adults in the United States have high blood pressure—and many don't have their hypertension under control. But when patients measure their blood pressure regularly, and share those measurements with their doctors, they are playing an important role in their care.

“It's so important to partner with patients on improving their blood pressure. Having patients take their own BP measurements is a way to do that and engage patients in self-management of their blood pressure,” said Michael Rakotz, MD, a family physician and vice president of health outcomes at the AMA.

Here is what physicians wish patients knew about taking their own blood pressure measurements outside of the clinical setting, also commonly referred to as self-measured BP (SMBP).

Who should measure BP at home

“Anyone who already has a diagnosis of high blood pressure can use SMBP to track their BP over time,” Dr. Rakotz said. “The measurements can help physicians assess the effectiveness of treatments being used.”

“If a patient doesn't have a diagnosis of high blood pressure, home measurements can be used to make an accurate diagnosis,” he said. “But it's also important to understand that if a patient does have high blood pressure, taking home measurements alone is not an effective form of treatment.

“SMBP is something that can be used by a physician and care team to make sure that the treatment plan a patient is following is working and should be accompanied by clinical support,” Dr. Rakotz added.

Not all BP measurement devices are equal

“Make sure that a home BP measurement device has been validated for clinical accuracy, which means it has been tested to make sure that it will give accurate measurements,” said Dr. Rakotz. Patients “can either look at a validated device list or they can ask their doctor for a recommendation.”

Use the US Blood Pressure Validated Device Listing™ to find blood pressure measurement devices that have been validated for clinical accuracy and are available in the U.S.

Use an upper arm, automated device

“Home blood pressure measurement devices should have upper arm cuffs and automatically inflate,” said Dr. Rakotz. “This means that you push a button to take the measurement so you don’t have to squeeze a bulb to manually inflate the cuff and use a stethoscope to obtain readings.”

“Patients also should use an upper arm cuff that is appropriately sized for their arm to get accurate measurements,” he said, adding that “home BP measurement devices typically come with a standard-sized cuff, so it’s helpful to make sure that the standard cuff fits a patient’s mid-upper arm appropriately.

“If the standard cuff does not fit, the device will not provide accurate measurements,” Dr. Rakotz added.

“Other nice features for the device to have are memory storage and for it to be Bluetooth enabled.”

Prepare and position yourself properly

“Patients should rest quietly for five minutes while sitting in a comfortable position before measuring their blood pressure,” said Dr. Rakotz. “When taking a BP measurement, patients should sit with their legs uncrossed, feet supported on the floor or a firm surface, back supported and arm supported on a firm surface with the cuff at the level of the heart—which is about mid-chest.”

“Most measurement-related errors increase blood pressure temporarily,” he said. “This can be a real problem if a physician is trying to diagnose or treat blood high blood pressure based on home readings.”

“Preparation and positioning are key to obtaining accurate measurements so physicians and care teams should educate patients on how to properly take BP measurements themselves,” said Dr. Rakotz.

Here is the one graphic to help educate patients on taking an accurate blood pressure reading.

How often to measure BP

“Two blood pressure measurements, one minute apart, should be taken each time home measurements are performed. Measurements should be taken in the morning and evening,” said Dr. Rakotz. “Again, that’s two blood pressure readings, one minute apart, twice daily for seven days. If all of these measurements are taken, that will add up to 28 readings in a one-week period.”

“Make sure all measurement results are shared with the physician and care team,” he said, adding that “based on the results the physician will make treatment decisions and recommendations.”

How to communicate BP readings

“There are several options for communicating blood pressure results back to a physician or care team,” said Dr. Rakotz. “Patients can write their readings down on a blood pressure measurement log , or if the device has memory, they can bring it to the office to be reviewed.”

“Some devices can be connected to mobile phones or apps and the BPs can be securely transmitted to the physician and care team,” he said. Additionally, “some apps have the ability to transfer readings directly to the physician and care team, and some apps have secure portals where measurements can be viewed.

“I also always suggest writing all the measurements down to have a backup on paper,” Dr. Rakotz added.

What to do if your BP is high

“Make sure there are clear instructions so patients know what to do if the blood pressures taken at home are higher or lower than expected” said Dr. Rakotz, emphasizing that “patients and physicians should make a plan together.”

For example, “if your blood pressure was much higher than usual and you have symptoms, your doctor might want you to call right away to discuss, or have you go to an emergency room, but if it's only slightly higher than usual your doctor might want you to recheck it again after five minutes, or even the next day,” he said. “Every patient has different levels of risk so instructions and plans will vary and your doctor will have a plan just for you.”

Why wearables aren't recommended

Many people choose to wear smartwatches, fitness bands or other devices to track their exercise or monitor other aspects of their health.

But while “the technology is advancing rapidly, we still don't have enough evidence to recommend regular use of these direct-to-consumer wearable devices for the diagnosis or clinical management of high blood pressure,” said Dr. Rakotz.

The AMA has developed online tools and resources created using the latest evidence-based information to support physicians to help manage their patients' high blood pressure. These resources are available to all physicians and health systems as part of Target: BP™, a national initiative co-led by the AMA and American Heart Association.

For additional insight and guidance on engaging patients using SMBP, tune into this Target: BP webinar on Thursday, July 15 at 12:00 p.m. CST and earn CME credit.